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### (54) Folding box provided with a reclosable opening

Faltschachtel mit wiederverschliessbarer Öffnung

Boîte pliante munie d'une ouverture refermable

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**Description**

The present invention relates to a box or holder to contain and dispense products.

In particular, the present invention relates to a box to contain and dispense medicines, cosmetics or similar products which are already contained in some form of primary packaging e.g. in phials, ampules, blister-packs or similar containers.

In accordance with a known technique, such products are generally put on sale inside boxes or holders also containing, in the case of medicines, an information leaflet giving the dose and other information.

The European Patent Application No. A-0430013, filed on 19.11.1990 with Italian priority of 30.11.1989, in the name of Grafiche Eikon, describes a box or holder for medicines or similar products, without information leaflets and in which one side of the box extends as a folding flap which can be non-permanently attached to the outside of one of the sides of the same box. The information from the information leaflet is reproduced on said movable flap of the box.

The presently known boxes all have a problem of interior access, e.g. when the contents have to be checked for integrity and completeness at the moment of sale.

Similarly, all the contents, ampules in their racks or blister-packs, must be removed each time a single dose has to be removed to be administered or taken.

US-A-4,284,197 discloses a box, the upper portion of which forms a "cap" comprising the top side of the box and three lateral sides. This "cap" is pivotable and, when closed, overlaps to corresponding three lateral sides of the box.

A portion of one of these sides is attached to a side of the "cap" and may be removed upon lifting of the "cap".

US-A-5,123,589 discloses a recloseable package box for developed photographic prints or similar flat articles, having length and height substantially greater than its thickness when erected. The box has an open top and a top closure panel attached at each end corner of its free edge to the box body; the attached corners are defined by preset rupture lines to permit opening of the closure panel.

An object of the present invention is to overcome the above mentioned problems by means of a box or holder with improved accessibility.

This object is achieved by the present invention, which relates to a box or holder according to claim 1.

According to a preferred embodiment of the invention, a part of one of the sides of the body of the box is attached to the closure flap and a line of perforations allows it to be detached from the body of the box when the closure flap is raised to open the box. The removal of laid part completes the formation of the opening giving access to the interior of the box.

According to another aspect of the invention, the closure flap is temporarily attached to the body of the

box by glueing an extremity of the flap defined by a line of pre-set detaching perforations in the flap for the detachment of the same flap from the body of the box.

The box according to the present invention offers obvious advantages on the present state of the art; in addition to an increased accessibility to the interior of the box, the presence of the tear-off glued extremity of the closure flap constitutes an anti-tamper device without impeding closure of the box once it has been opened.

Furthermore, the closure flap can be printed with information relating to the product e.g. the ingredients in the case of sweets or food products, or the contents of the information leaflet, thus obviating the need for the latter, in the case of pharmaceutical products.

The invention will now be described in more detail, with reference to the attached illustrative but non-limitative drawings, in which:

- 20 - figs. 1 and 2 are respectively a plan view of a die-cut element, and a perspective view of a box according to the invention.
- figs. 3 - 5 are plan and perspective views of another embodiment of the invention.

With reference first of all to figs. 1 and 2, the box according to the invention consists substantially of a die-cut element, preferably in cardboard, of a type normally used as commercial container for medical, cosmetic and similar products usually already in a primary pack e.g. a blister pack (for pills, tablets and similar products) or phials.

Naturally, it is not intended that protection be limited to only those products mentioned above. Furthermore, it should be noted that by the term "die-cut element" is intended any element obtained by press die-cutting, regardless of the material in which it is made, as well as similar shapes obtained by other techniques such as stamping.

The die-cut element 1 of fig. 1 presents a plurality of sides 2 - 6 which together form the body of the box assembled in an already known manner. In particular there are two longitudinal sides 2 and 3, and two transverse sides 4 and 5; the remaining side 6 is attached by glue to the side 3 to form the body of the box, which is re-sealable by gluing wings 8 together, or by tucking in tongues 9 shown by broken lines in fig. 1 and the wings 8.

As it can be seen, a part 7 of the side 3 has been cut out and forms an opening to the interior when the box is assembled.

Said opening can be re-sealed by means of a flap 10 which extends from side 6 and can be attached to side 3 of the box.

The opening 12, which is formed when the box is assembled and opened, could exactly correspond to the cut-out portion 7 (extending also to both sides of the body of the box - figs. 3 and 4) or could be formed by the

removal of part 7 and the removal of a further part of one or more sides of the body of the box. This latter solution is shown in the embodiment of figs 1 and 2.

In the case of figs. 1 and 2, the flap 10 is an extension to, and an integral part of side 6, i.e. there are no separating fold-lines; side 6 and flap 10 form a single whole. As described above, side 6 is attached to the remaining end side 3 of the die-cut element 1 to form the body of the box; in particular, side 6 is glued to the outer area 3a of side 3. Said area 3a is defined with respect to the rest of side 3 by perforation lines 13 and in part by the cut-out portion 7, such as to cause area 3a to tear away from the remaining side 3 when the box is opened (Fig.2) thus forming a larger opening 12 than the cut-out 7 alone.

According to another embodiment of the invention, not shown, area 3a of side 3 could include the area corresponding to the cut-out 7. In other words, there would not be any cut-out 7 in said embodiment; the opening 12 would be formed by area 3a being torn away when the box is opened.

The embodiment shown in figs. 3 - 5 is similar to that of figs 1 and 2, with the difference that in this case the closure flap is composed of three elements 10a, 10b and 10c.

The first of these, 10a, corresponds to the flap 10 integral with side 6 described in fig.1. Since the closure flap extends to three sides of the body of the box, the closure elements 11 and 15 are attached to side 2 of the box instead of side 3 as in fig. 2.

Independent of the shape of the opening 12 or the closure flap of the same, the closure flap preferably presents means of attachment which can removably attach it to the underlying side of the body of the box up to the box opening.

According to the preferred embodiment shown in figs. 1 - 5, said means consist of a plurality of glue points or glue zone(s) 14, which attach the outer area 11 of the closure flap to the underlying side - side 3 in fig. 2 - of the box. Said glue zone is defined by a line of perforations 15 which allows the closure flap 10 to be torn away from its outer edge 11 which remains glued to the body of the box.

The remaining part of the closure flap, presents further means of attachment so that it can be attached in a non-permanent way to the body of the box. Said means consist e.g. of portions of a pressure adhesive of the replaceable type or, as shown in the figures, of a slot 17 cut into the body of the box, preferably surmounted by a cutaway to facilitate its use, and a projecting tab 16 on the outer edge of the closure flap.

Furthermore, to facilitate the tearing of the closure flap from the fixed part 11, the corners of the same are preferably notched at 16a.

If desired, the internal part of the closure flap, regardless of how it is produced, could carry instructions about the use of the product which could replace or complement any information leaflet in the pack.

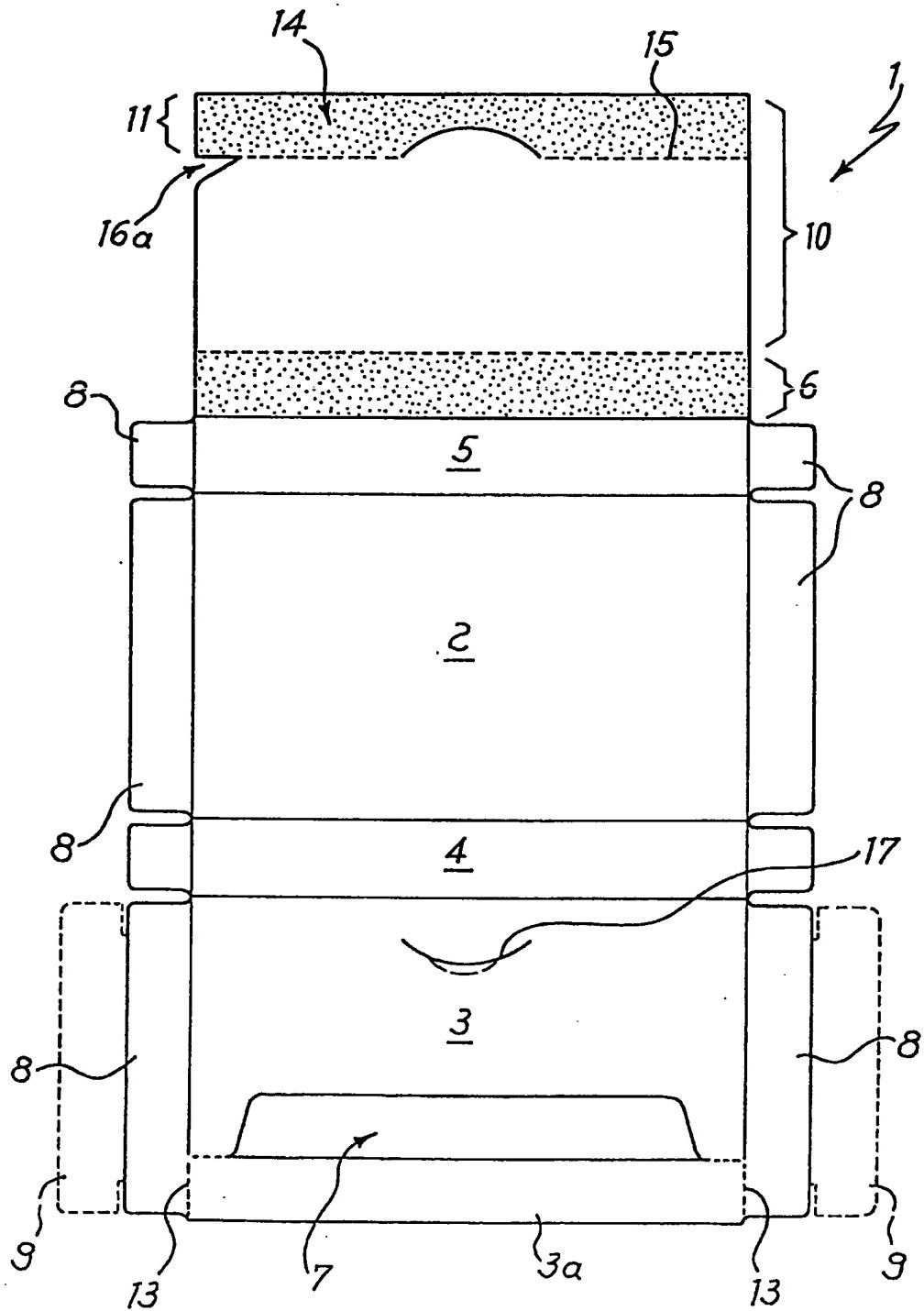
## Claims

5. A box or holder of the type consisting of a single die-cut element (1) folded and glued to form the body of a box comprising first (3) and second (2) longitudinal sides first (4) and second (5) transversal sides and a terminal side (6), a flap (10) extending from one of said sides (6) and being folded over to another of said sides (3, 3a) that is provided with at least an access opening to the interior of said made-up open box, characterized in that said closure flap is an extension of said terminal side (6), said flap and said first longitudinal side (3, 3a) are located at opposed ends of the die-cut element, and said flap is directly superimposed and fixed to said first longitudinal side (3, 3a) of the box in correspondence of a part (3a) of said side (3, 3a) defined by pre-set rupture lines (13), said part (3a) being detached from the remaining part of said side (3) when said closure flap (6, 10) is opened to form in whole or in part said access opening.
10. 2. A box according to claim 1, characterized in comprising a first part (7) cut out from the die-cut element on said first longitudinal side (3, 3a) of the body of the box, a second part (3a) of said side (3), adjacent to said first die-cut part (7), defined with respect to the remaining part of said side (3) by pre-set rupture lines (13), said second part being attached to said closure flap (6, 10) to be removed from said side (3) of the box together with said flap (6, 10) when said flap is opened in order to form said access opening.
15. 3. A box according to claim 2, characterized in that said terminal side (6) of the die-cut element is fixed to said second, detachable part (3a) of said first longitudinal side (3, 3a).
20. 4. A box according to any previous claim, characterized in that said opening extends to two adjacent sides of the box and said external closure flap is formed by at least two folding elements (10a-10c).
25. 5. A box according to any claim 1 to 4, characterized in that said closure flap (6, 10) comprise two further parts (10b, 10c) and extends over three sides of said body of the box.
30. 6. A box according to any one of the preceding claims, characterized in that said closure flap (6, 10) is temporarily attached by attachment means to the underlying side of the body of the box.
35. 7. A box according to claim 6, characterized in that said attachment means comprises glue point(s) (14) between the outer edge (11) of said closure flap (6, 10) and the underlying side of the body of the box, a pre-set rupture line (15) defining the glue

- point(s) of the flap with respect to the remaining flap (10) for its detachment from said flap upon opening of the box, as well as further means (16, 17) for temporarily attaching said non-glued flap extremity to the body of the box.
8. A box according to claim 7, characterized in that said means of non permanent attachment of said closure flap comprise a slit (17) cut into said body of the box near said glued extremity of the closure flap.
9. A box according to any claim 1 to 8, characterized in that said closure flap is temporarily attached by means of strips of pressure adhesive of a re-sealable type.
10. A box according to one of claims 7 to 9, characterized in that said closure flap has one or more notches (16a) in correspondence to said pre-set rupture line (15) to facilitate gripping the flap.
- Patentansprüche**
1. Schachtel oder Behälter, bestehend aus einem einzigen Stanzelement (1), das zum Ausbildendes Körpers einer Schachtel gefaltet und geklebt ist, das erste (3) und zweite (2) Längsseiten, erste (4) und zweite (5) Querseiten und eine Endseite (6) umfaßt, wobei sich eine Lasche (10) von einer der Seiten (6) erstreckt und zu der anderen der Seiten (3, 3a) umgebogen wird, die mit mindestens einer Zugangsoffnung zum Inneren der zusammengenähten, offenen Schachtel versehen ist, gekennzeichnet dadurch, daß die Verschlußlasche eine Verlängerung der Endseite (6) ist, die Lasche und die erste Längsseite (3, 3a) an gegenüberliegenden Enden des Stanzelementes angeordnet sind und die Lasche direkt mit der ersten Längsseite (3, 3a) der Schachtel in Entsprechung zu einem Teil (3a) der Seite (3, 3a), das durch vorgegebene Bruchlinien (13) definiert ist, übereinander gelegt und an dieser befestigt ist, wobei das Teil (3a) von dem restlichen Teil der Seite (3) abgelöst wird, wenn die Verschlußlasche (6, 10) geöffnet wird, um die Zugangsoffnung vollständig oder teilweise zu bilden.
2. Schachtel nach Anspruch 1, gekennzeichnet durch Umfassen eines ersten Teiles (7), dasaus dem Stanzelement auf der ersten Längsseite (3, 3a) des Körpers der Schachtel ausgeschnitten ist, eines zweiten, an das erste ausgeschnittene Teil (7) angrenzenden Teiles (3a) der Seite (3), das in bezug auf den restlichen Teil der Seite (3) durch vorgegebene Bruchlinien (13) definiert ist, wobei das zweite Teil an der Verschlußlasche (10) angefügt ist, um von der Seite (3) der Schachtel zusammen mit der Lasche (6, 10) abgetrennt zu werden,
- wenn die Lasche geöffnet wird, um die Zugangsoffnung zu bilden.
3. Schachtel nach Anspruch 2, gekennzeichnet dadurch, daß die Endseite (6) des Stanzelementes an dem zweiten lösbar Teil (3a) der ersten Längsseite (3, 3a) angefügt ist.
4. Schachtel nach jedem vorhergehenden Anspruch, gekennzeichnet dadurch, daß sich die Öffnung auf zwei benachbarte Seiten der Schachtel erstreckt und daß die externe Verschlußlasche durch mindestens zwei Faltelelemente (10a-10c) gebildet wird.
5. Schachtel nach jedem Anspruch 1 bis 4, gekennzeichnet dadurch, daß die Verschlußlasche (6, 10) zwei weitere Teile (10b, 10c) umfaßt und sich über drei Seiten des Körpers der Schachtel erstreckt.
6. Schachtel nach einem der vorhergehenden Ansprüche, gekennzeichnet dadurch, daß die Verschlußlasche (6, 10) zeitweise durch Befestigungsmittel an der darunterliegenden Seite des Körpers der Schachtel befestigt ist.
7. Schachtel nach Anspruch 6, gekennzeichnet dadurch, daß das Befestigungsmittel zwischen der Außenkante (11) der Verschlußlasche (6, 10) und der darunterliegenden Seite des Körpers der Schachtel sowohl einen Klebpunkt/Klebpunkte (14), eine vorgegebene Bruchlinie (15), die den Klebpunkt/die Klebpunkte der Lasche in bezug auf die restliche Lasche (10) für ihre Ablösung von der Lasche beim Öffnen der Schachtel definiert, als auch weitere Mittel (16, 17) zum zeitweisen Befestigen des nichtgeklebten Laschenrandes an dem Körper der Schachtel umfaßt.
8. Schachtel nach Anspruch 7, gekennzeichnet dadurch, daß die Mittel zur nicht permanenten Befestigung der Verschlußlasche einen Schlitz (17) umfassen, der nahe dem geklebten Rand der Verschlußlasche in den Körper der Schachtel geschnitten ist.
9. Schachtel nach jedem Anspruch 1 bis 8, gekennzeichnet dadurch, daß die Verschlußlasche zeitweise mit Hilfe von Streifen aus wiederverschließbarem Druckhaftmittel befestigt wird.
10. Schachtel nach einem der Ansprüche 7 bis 9, gekennzeichnet dadurch, daß die Verschlußlasche eine oder mehrere Kerben (16a) in Entsprechung zu der vorgegebenen Bruchlinie (15) besitzt, um das Greifen der Lasche zu erleichtern.

**Revendications**

1. Boîte ou récipient du type consistant en un élément poinçonné unique (1) plié et collé pour former le corps d'une boîte comprenant une première (3) et une deuxième (2) faces longitudinales, une première (4) et une deuxième (5) faces transversales et une face terminale (6), un rabat (10) s'étendant à partir d'une des dites faces (6) et étant rabattu sur une autre des dites faces (3,3a) qui comporte au moins une ouverture d'accès à l'intérieur de ladite boîte une fois ouverte, caractérisé en ce que ledit rabat de fermeture est un prolongement de ladite face terminale (6), ledit rabat et la dite première face longitudinale (3,3a) sont situés aux extrémités opposées de l'élément poinçonné, et ledit rabat est directement superposé et fixé à ladite première face longitudinale (3,3a) de la boîte en correspondance d'une partie (3a) de ladite face (3,3a) définie par des lignes de rupture préformées (13), ladite partie (3a) étant détachée de la partie restante de ladite face (3) lorsque ledit rabat de fermeture (6,10) est ouvert, afin de former en totalité ou en partie ladite ouverture d'accès.
- 5
2. Boîte suivant la revendication 1, caractérisée en ce qu'elle comprend une première Partie (7) découpée dans l'élément poinçonné, sur ladite première face longitudinale (3,3a) du corps de la boîte, une deuxième partie (3a) de ladite face (3), adjacente à ladite première partie découpée (7), définie par rapport à la partie restante de ladite face (3) par des lignes de rupture préformées (13), ladite deuxième partie étant attachée audit rabat de fermeture (6,10) de manière à être enlevée de ladite face (3) de la boîte en même temps que ledit rabat (6,10) lorsqu'on ouvre ledit rabat, afin de former ladite ouverture d'accès.
- 10
3. Boîte suivant la revendication 2, caractérisée en ce que ladite face terminale (6) de l'élément poinçonné est fixée à ladite deuxième partie détachable (3a) de ladite première face longitudinale (3,3a).
- 15
4. Boîte suivant une quelconque des revendications précédentes, caractérisée en ce que ladite ouverture s'étend à deux faces adjacentes de la boîte et le dit rabat de fermeture externe est constitué d'au moins deux éléments pliables (10a-10c).
- 20
5. Boîte suivant une quelconque des revendications 1 à 4, caractérisée en ce que ledit rabat de fermeture (6,10) comprend deux parties supplémentaires (10b,10c) et s'étend sur trois faces dudit corps de la boîte.
- 25
6. Boîte suivant une quelconque des revendications précédentes, caractérisée en ce que ledit rabat de fermeture (6,10) est temporairement attaché par des moyens de fixation à la face sous-jacente du corps de la boîte.
- 30
7. Boîte suivant la revendication 6, caractérisée en ce que lesdits moyens de fixation comprennent un ou plusieurs points de colle (14) entre le bord extérieur (11) dudit rabat de fermeture (6,10) et la face sous-jacente du corps de la boîte, une ligne de rupture préformée (15) définissant le ou les points de colle du rabat par rapport au reste du rabat (10) pour son détachement dudit rabat lors de l'ouverture de la boîte, ainsi que des moyens supplémentaires (16,17) pour attacher temporairement ladite extrémité de rabat non collée au corps de la boîte.
- 35
8. Boîte suivant la revendication 7, caractérisée en ce que lesdits moyens d'attache temporaire dudit rabat de fermeture comprennent une fente (17) incisée dans ledit corps de la boîte près de ladite extrémité collée du rabat de fermeture.
- 40
9. Boîte suivant une quelconque des revendications 1 à 8, caractérisée en ce que ledit rabat de fermeture est temporairement attaché au moyen de bandes d'adhésif à pression d'un type recollable.
- 45
10. Boîte suivant une quelconque des revendications 7 à 9, caractérisée en ce que ledit rabat de fermeture comporte une ou plusieurs entailles (16a) en correspondance de ladite ligne de rupture préformée (15), afin de faciliter la prise du rabat.
- 50
- 55

Fig. 1

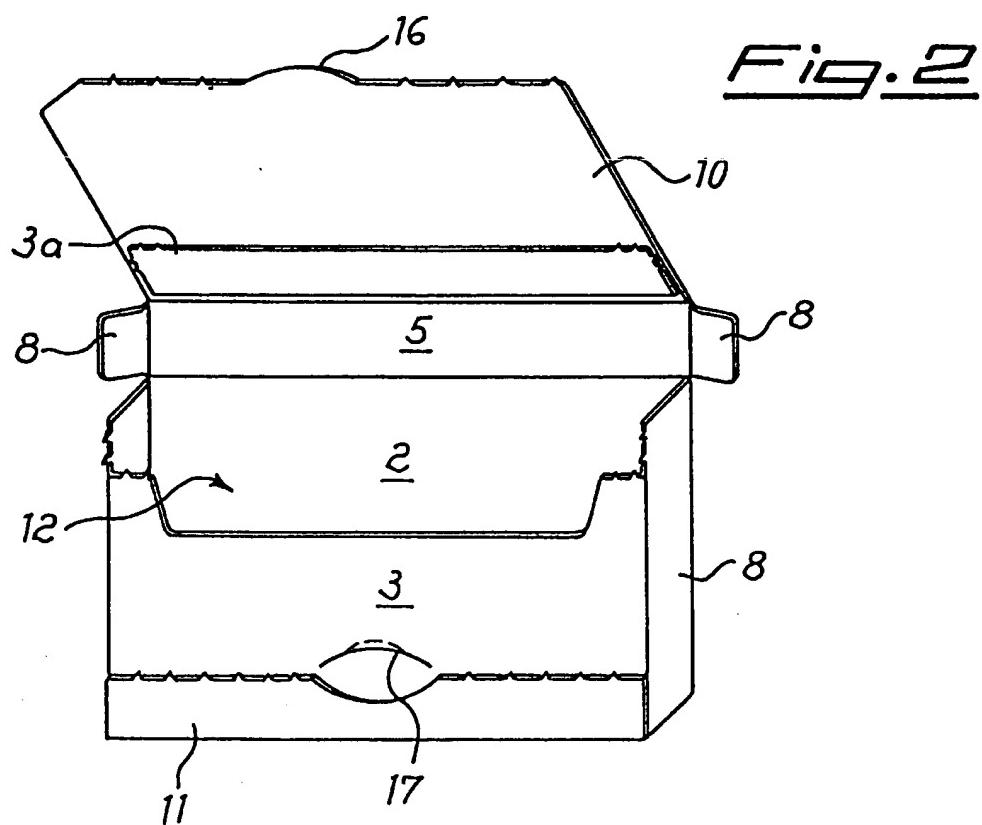


Fig. 3

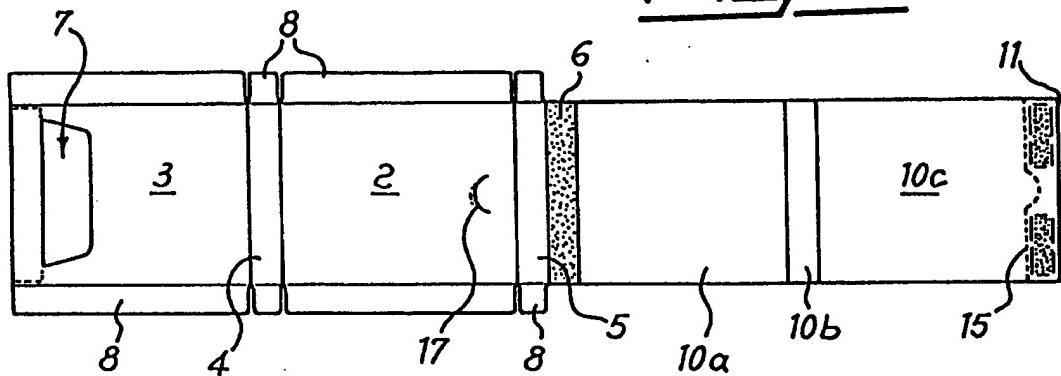


Fig. 4

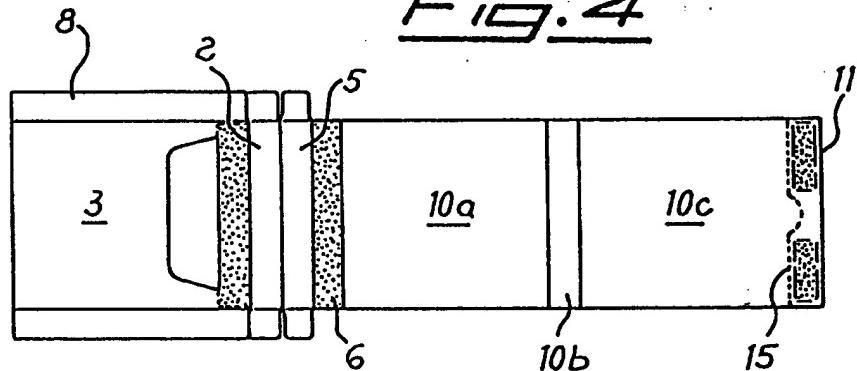


Fig. 5

